

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,753	12/08/2003	Shigeru Murata	2003_1575A	9368
513 7590 07/17/2007 WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W.			EXAMINER	
			WEINSTEIN, LEONARD J	
SUITE 800 WASHINGTON, DC 20006-1021			ART UNIT	PAPER NUMBER
			3746	
			MAIL DATE	DELIVERY MODE
			07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/728,753	MURATA, SHIGERU			
Office Action Summary	Examiner	Art Unit			
	Leonard J. Weinstein	3746			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  (36(a)). In no event, however, may a reply be tirgoid apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 30 A	pril 2007.				
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 5-9 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>5-9</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/c	or election requirement.				
Application Papers					
9) The specification is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>08 December 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.					
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correc	= ' '				
11)☐ The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	e Action or form PTO-152.			
Priority under 35 U.S.C. § 119		•			
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. § 119(a	)-(d) or (f).			
1. Certified copies of the priority document	ts have been received.				
	2. Certified copies of the priority documents have been received in Application No				
	3. Copies of the certified copies of the priority documents have been received in this National Stage				
application from the International Burea					
* See the attached detailed Office action for a list	of the certified copies not receive	ed.			
Attachment(s)					
1) Notice of References Cited (PTO-892)	4) Interview Summary				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D 5) Notice of Informal F				
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	6) Other:	,			

Application/Control Number: 10/728,753 Page 2

Art Unit: 3746

## **DETAILED ACTION**

1. This office action is in response to the amendment of April 30, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

2. The examiner acknowledges that claims 1-4 have been cancelled and claims 5-9 have been added in the amendment of April 30, 2007.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 4. Claims 5-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Steck et al. 6,402,486. Steck teaches all the limitations as claimed for a reciprocating fluid transfer pump, as shown in figures 1-4, including: a main body block 16 including a fluid supply passage 24a and a fluid discharge passage 24b, a center rod 64 inserted in the main body block 16 and being capable of reciprocating movement relative to the main body block 16, a barrier membrane 60a attached to an end portion of the center rod 62a, the barrier membrane 60a and the main body block 16 defining a fluid delivering chamber 19 and a driving chamber 17 such that a fluid, once having suctioned into the fluid delivering chamber 19, is discharged by expanding and contracting the barrier membrane 60a, a main ring 20a engaged via threads (col. 10 ll. 41-43) with an annular wall 83 formed in the main body block 16, the main ring 20a being movable rotationally relative to the main body block 16 to insert the annular wall 83 of the main body block 16 into an annular space, as shown in figure 4 and defined by the space

Application/Control Number: 10/728,753 Page 3

Art Unit: 3746

between elements 84 and 86 and further defined by element 76, between an outer annular 86 portion of the main ring 20a and an inner annular 84 portion of the main ring 20a such that a peripheral portion of the barrier membrane 60a is clamped, via elements 80 and 82, and thus fixedly secured to the main body block 16, and a pilot valve assembly block 30 fixedly secured to the main body block 16 by engaging the main ring 20a with the main body block 16, the pilot valve assembly block 30 having a pilot valve 134 integrated therein as one body for detecting reciprocating motion of the center rod 64, and a sub ring 22a engaged via a thread with a threaded section 148 of the pilot valve assembly block 30 such that, by fastening of the sub ring 22a, the pilot valve assembly 30 is pressed against and fixedly secured to the main body 16 with the aid of the main ring 20a; a change-over valve assembly block 14 having a change-over valve 90 integrated therein as one body for switching movable directions of the center rod 64, the change-over valve assembly block 14 being fixedly secured to the main body block 16, wherein the change-over valve assembly block 14 and the pilot valve assembly block 30 are interconnected via a piping block 34 defining flow channels for connecting respective ports of the change-over valve 90 with respective ports of the pilot valve 30 (col. 13 II. 57-64); a piping block 14 having connectors 198 (col. 17 II. 30-45) for providing connections from the respective ports, elements 230, 232, 234, 236, 238 to respective flow channels, elements 220, 240, 242, and 244 of the piping block 14; a piping block 14 being secured fixedly to the main body block 16 via the pilot valve assembly block 30; and a second barrier membrane 60b attached to a second end portion 62b of the center rod 64.

## Response to Arguments

5. Applicant's arguments with respect to claims 5-9 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 3746

## Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are cited on form 892 herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is 571-272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

huffet

ANTHONY D. STASHICK SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3700